

CLAIMS

What is claimed is:

- 1 1. A method of determining participants of a distributed operation in a distributed
 2 system, the method comprising the steps of:
 3 registering in a name service participant data that identifies a plurality of
 4 participants that are participating in said distributed operation; and
 5 causing a node that requires information about participants in said distributed
 6 operation to retrieve said participant data from said name service.

- 1 2. The method of Claim 1, wherein the step of causing a node to retrieve said
 2 participant data includes causing said node to retrieve said participant data in
 3 response to said node performing deadlock detection.

- 1 3. The method of Claim 1, wherein:
 2 said distributed operation is a distributed transaction; and
 3 the step of registering includes registering in a name service participant data that
 4 identifies which database servers of a plurality of database servers are
 5 participating in said distributed transaction.

- 1 4. The method of Claim 1, further including the step of causing updates to said
 2 participant data to identify a new participant in said distributed operation.

- 1 5. The method of Claim 4, wherein:

2 said distributed operation is a distributed database transaction being executed by a
3 set of processes coordinated by a coordinator process;
4 the method further includes the step of said coordinator process causing a new
5 process on a database server to participate in said distributed database
6 transaction; and
7 the step of causing updates to said participant data includes said coordinator
8 process causing updates to said participant data in response to said new
9 process participating in said distributed database transaction.

1 6. The method of Claim 1, wherein

2 said distributed operation is a distributed database transaction;
3 the step of registering includes registering participant data that identifies which
4 database servers of a plurality of database servers are participating in said
5 distributed database transaction; and
6 the step of causing a node to retrieve said participant data includes causing a node
7 that requires information about participants in said distributed database
8 transaction to retrieve said participant data from said name service.

1 7. The method of Claim 1, wherein:

2 said distributed operation is a distributed database transaction;
3 the method further includes the step of assigning a transaction identifier to said
4 distributed database transaction;
5 the step of registering includes registering in said name service data that associates
6 said participant data with said transaction identifier; and

7 the step of causing a node includes causing a node to request from said name
 8 service published data associated with said transaction identifier.

1 8. The method of Claim 1, wherein the step of causing a node to retrieve said
 2 participant data includes said name service process receiving a request from a first
 3 process to supply said participant data, wherein said name service process and
 4 said first process reside on said node.

1 9. The method of Claim 8, wherein the step of causing a node to retrieve said
 2 participant data includes said name service process retrieving said participant data
 3 from one or more data structures residing on said node in response to receiving
 4 said request.

1 10. The method of Claim 1, wherein the step of causing a node to retrieve said
 2 participant data includes a name service process receiving a request from a first
 3 process to supply said participant data, wherein said name service process and
 4 said first process reside on said node.

11. A computer-readable medium carrying one or more sequences of one or more
 2 instructions for determining participants of a distributed operation in a distributed
 3 system, the one or more sequences of one or more instructions including
 4 instructions which, when executed by one or more processors, cause the one or
 5 more processors to perform the steps of:
 6 registering in a name service participant data that identifies a plurality of
 7 participants that are participating in said distributed operation; and

- 8 causing a node that requires information about participants in said distributed
 9 operation to retrieve said participant data from said name service.

12. The computer-readable medium of Claim 11, wherein the step of causing a node
 to retrieve said participant data includes causing said node to retrieve said
 participant data in response to said node performing deadlock detection.

13. The computer-readable medium of Claim 11, wherein:
 said distributed operation is a distributed transaction; and
 the step of registering includes registering in a name service participant data that
 identifies which database servers of a plurality of database servers are
 participating in said distributed transaction.

14. The computer-readable medium of Claim 11, further including the step of causing
 updates to said participant data to identify a new participant in said distributed
 operation.

15. The computer-readable medium of Claim 14, wherein:
 said distributed operation is a distributed database transaction being executed by a
 set of processes coordinated by a coordinator process;
 the computer-readable medium further includes sequences of instructions for
 performing the step of said coordinator process causing a new process on a
 database server to participate in said distributed database transaction; and

the step of causing updates to said participant data includes said coordinator process causing updates to said participant data in response to said new process participating in said distributed database transaction.

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16. The computer-readable medium of Claim 11, wherein
said distributed operation is a distributed database transaction;
the step of registering includes registering participant data that identifies which
database servers of a plurality of database servers are participating in said
distributed database transaction; and
the step of causing a node to retrieve said participant data includes causing a node
that requires information about participants in said distributed database
transaction to retrieve said participant data from said name service.

17. The computer-readable medium of Claim 11, wherein:
said distributed operation is a distributed database transaction;
the computer-readable medium further includes sequences of instructions for
performing the step of assigning a transaction identifier to said distributed
database transaction;
the step of registering includes registering in said name service data that associates
said participant data with said transaction identifier; and
the step of causing a node includes causing a node to request from said name
service published data associated with said transaction identifier.

18. The computer-readable medium of Claim 11, wherein the step of causing a node
to retrieve said participant data includes said name service process receiving a

3 request from a first process to supply said participant data, wherein said name
4 service process and said first process reside on said node.

1 19. The computer-readable medium of Claim 18, wherein the step of causing a node
2 to retrieve said participant data includes said name service process retrieving said
3 participant data from one or more data structures residing on said node in response
4 to receiving said request.

1 20. The computer-readable medium of Claim 1, wherein the step of causing a node to
2 retrieve said participant data includes a name service process receiving a request
3 from a first process to supply said participant data, wherein said name service
4 process and said first process reside on said node.

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